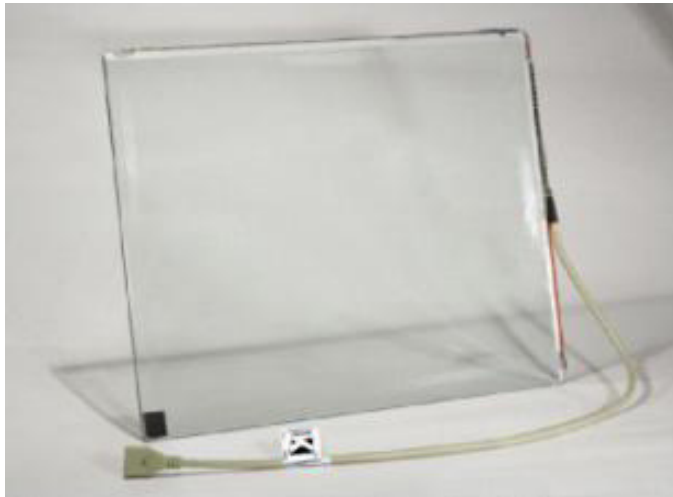


7"-24" SAW Touch Panel

(the Standard Type)

User Guide

Rev2.0



KeeTouch SAW Sensor



KeeTouch Controller

Shenzhen K&JAD Technology Co., Ltd

www.keetouch.com

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Touch Me, Touch Any

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◆ Part 1. Technical Specification

➤ SAW touch screen panel technical specification

Technology	Surface Acoustic Wave(SAW)	
Sizes	7" to 24" (extending)	
Controller Interface	USB and RS232	
Resolution	4096*4096 ,Z-axis 256, not related with the sizes of the touch screen panel	
Material	Pure glass	
Positional Accuracy	Standard deviation of error is less than 0.080 in.(2mm)	
Light Transmission	More than 90% per ASTM	
Touch Activation Force	30-60g	
Durability	Scratch-free; More than 50,000,000 touches in one location without failure.	
Surface Hardness	Mohs' hardness rating of 7	
Operating Temperature	Touch Panel	-20°C to +60°C
Storage Temperature	Touch Panel	-40°C to +70°C
Humidity	10%-90% RH at 40°C, non-condensing	
Operation Altitude	3800m	
Accessories	Connector cables, double-sided glue, dust-proof stripes	
Agency Approval	UL, CE, FCC, RoHS, CB	

➤ Controller technical specification

Sizes(PCB)	85mm*55mm*10mm	
Working voltage	5V±0.5V for KCA-UR01L-R1D or 12V±2V for KCA-UR01H-R1D	
Working Current	80mA for 12V controller 70mA for 5V controller	
Maximum Current	100mA for 12V controller 90mA for 5V controller	
Response time	≤10ms	
Operating temperature	-10°C-70°C	
Operating humidity	10%-90%RH.	
Storage temperature	-25°C-80°C	
Multi-Point Touch	Intelligent discrimination by software	
Drivers Available	Windows 2000, Windows XP, Windows NT, Linux	
Agency Approval	UL, CE, FCC, RoHS , CB	

◆ Part 2. Features

- Same driver for both USB and RS232 from 7" to 26"
- High image clarity
- Free of drift
- Z-axis pressure recognition
- Strong mechanical strength
- Short response time
- Compact size for easy integration

➤ **Customization available on glass sensor size, driver, accessories**

◆ **Part 3. Special Touch screen Products**

● **Vandal-Proof Touch screen(S series)**

- 4mm,6mm tempered glass
- Super impact-proof performance
- Ideal solution for unsupervised applications
- Standard sizes available: 7" to 22"
- GB9963-1998

● **Anti-glare Touch screen(G series)**

- Sunlight readable
- Human engineering technology: eye fatigue reduction
- Ideal solution for outdoor applications with strong sunlight
- Standard sizes available: 7" to 42"

● **Dust-proof Touch screen(P Series)**

- compliant with IEC IP6X standards
- protect the reflective grating and transducers from the dust and other objects
- Excellent maintenance-free and durability
- Sealed well with Alloy-aluminium frame
- Applicable to the outdoor environment where in unsupervised or industrial environments
- Standard sizes available: 7" to 24"

● **Water-proof Touch screen(W series)**

- Latest technology and design
- Super-thin glass sensor
- Easier integration
- Free of maintenance
- IP 65 Rated
- Standard sizes available: 10"and17" (customization available)
- Sealed well with Plastic frame or Alloy-Aluminium Frame

Remark: combined special functions are available



SAW with Alloy-aluminium Frame

◆ **Part 4. Accessories**

● **SAW Touch screen Controllers**

- Has USB and RS232 dual interface
- MTBF: more than 500,000 hours
- EMI disturbing restrained
- More stable, safer
- Less power consumption

● **Connector Cables**

- Standard length: 1.8m (customization available)
- RDL For R1D RS232 5V
- RDH For R1D RS232 12V

UDL For R1D USB 5V

UDH For R1D USB 12V

● **Double-sided adhesive double tapes**

- Various sizes available
- Excellent glue performance

● **Dust-proof Stripes**

- Thickness: 1.5mm-8mm
- Width: 3mm-8mm
- Length: any length
- Made of special material, excellent dust-proof performance, avoid signal loss

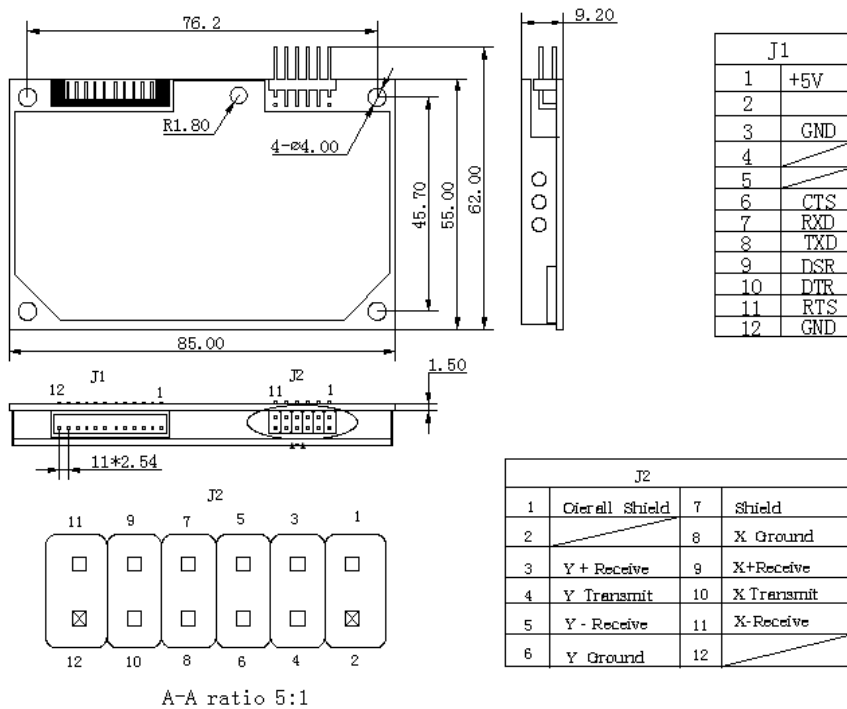
◆ **Part 5. Mechanical Drawings**

5.1: Mechanical Drawing of the SAW size from 7" to 24", please kindly read the drawing as attachment.

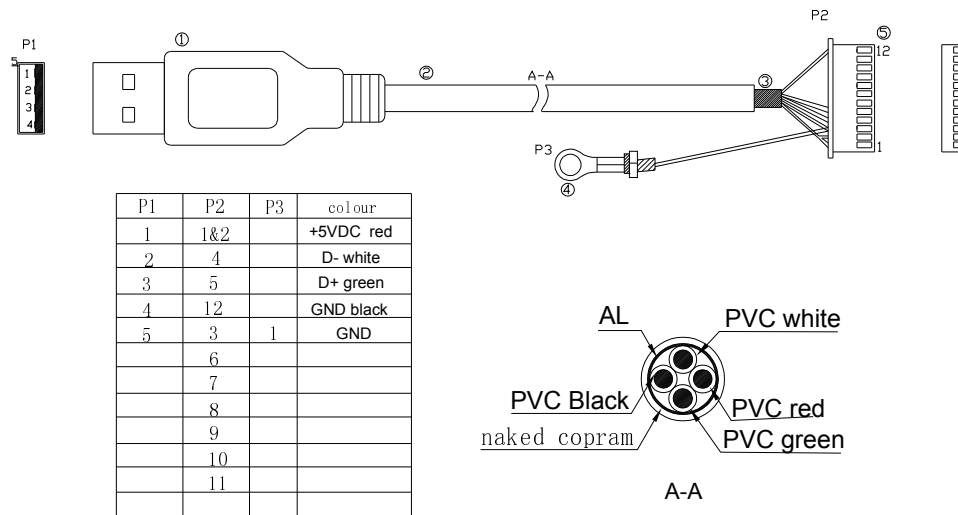
5.2 Mechanical Drawing of Controller and cable

5.2.1 Controller model: KCA-UR01L-R1D

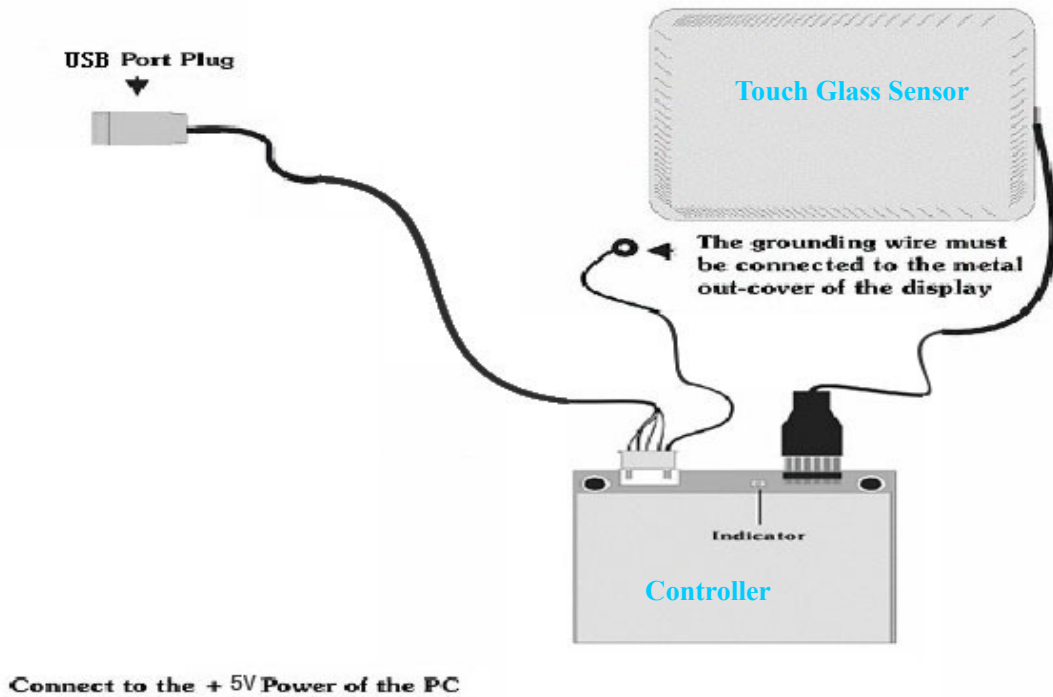
Technical specification: dual interface of USB/RS232; work on 5VDC which get from USB port and do not need another 5VDC power supplier;



(1) Controller cable model: UDL work with controller model KCA-UR01L-R1D

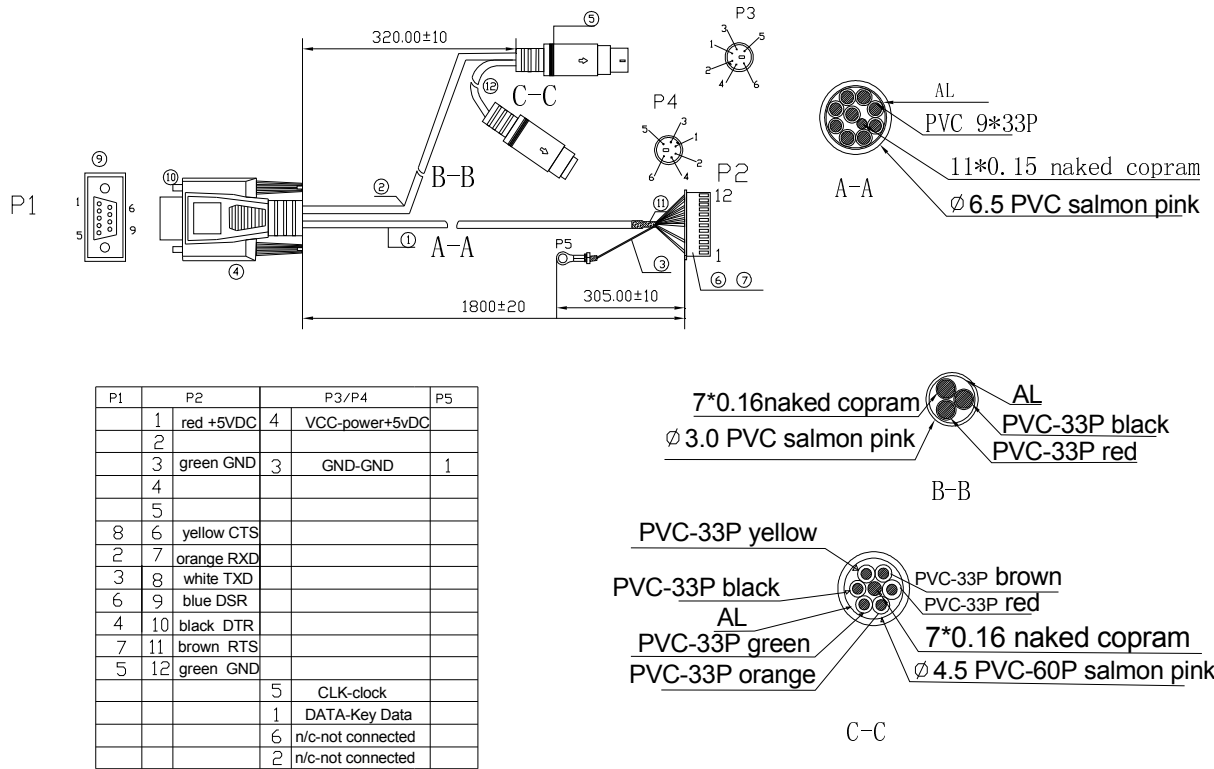


Connection of SAW touch component regarding controller model KCA-UR01L-R1D and cable model UDL

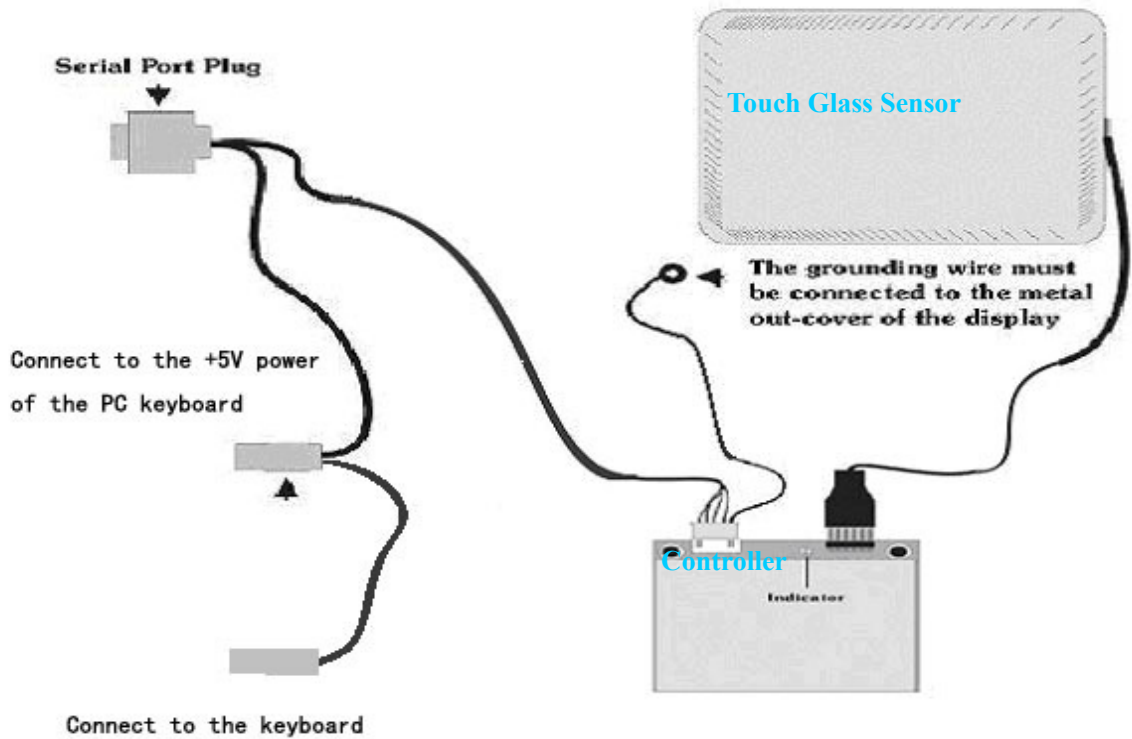


(2) Controller cable model: RDL

Work with controller model KCA-UR01L-R1D

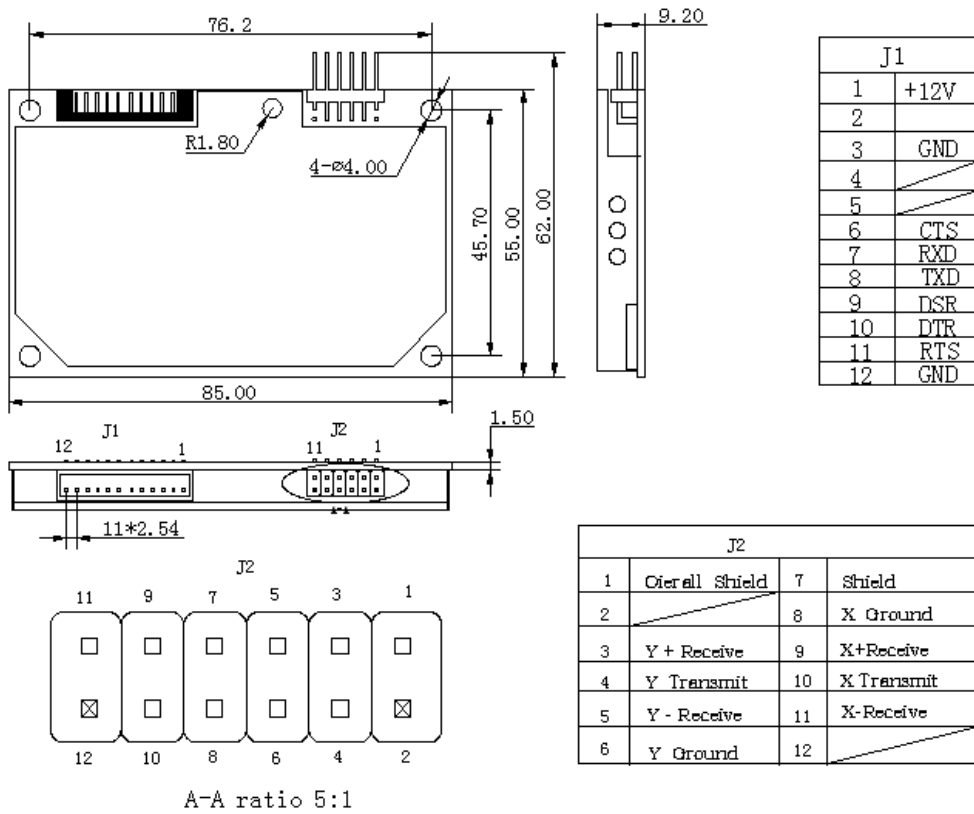


Connection of SAW touch component regarding controller model KCA-UR01L-R1D and cable model RDL



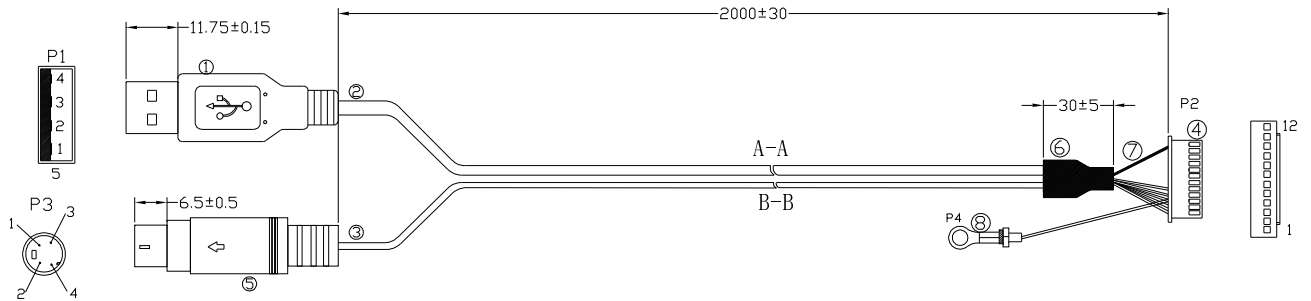
5.2.2 Controller model: KCA-UR01H-R1D

Technical specification: dual interface of USB/RS232; work on 12VDC which get the power from another 12VDC power supplier;

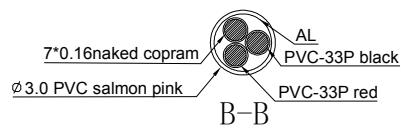
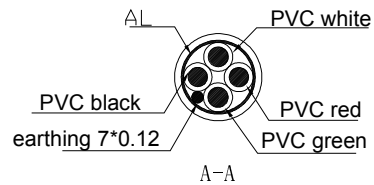


(1) Controller cable model: UDH

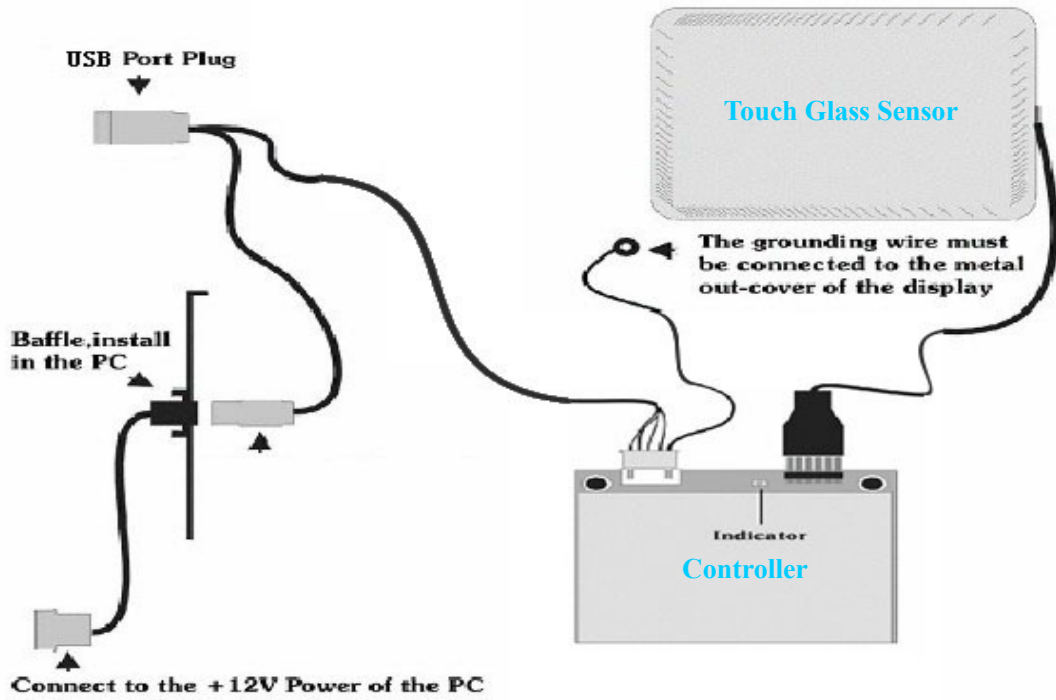
work with controller model KCA-UR01H-R1D



P1	P2	P3	P4	colour&Function
1	2			+5VDC red
2	4			D- white
3	5			D+ green
	3	2	1	GND black
4&5	12			GND naked copper
	1	1		+12VBus brown
	6			
	7			
	8			
	9			
	10			
	11			

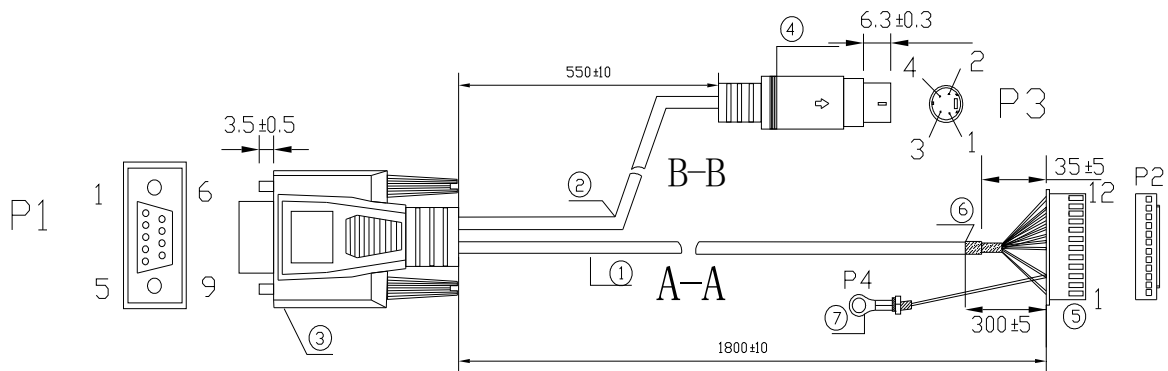


Connection of SAW touch component regarding controller model KCA-UR01H-R1D and cable model UDH

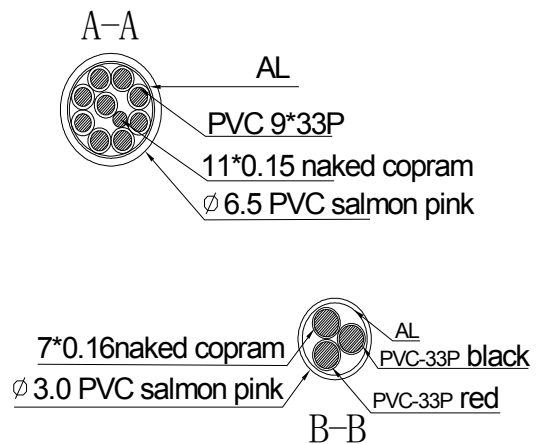


(2) Controller cable model: RDH

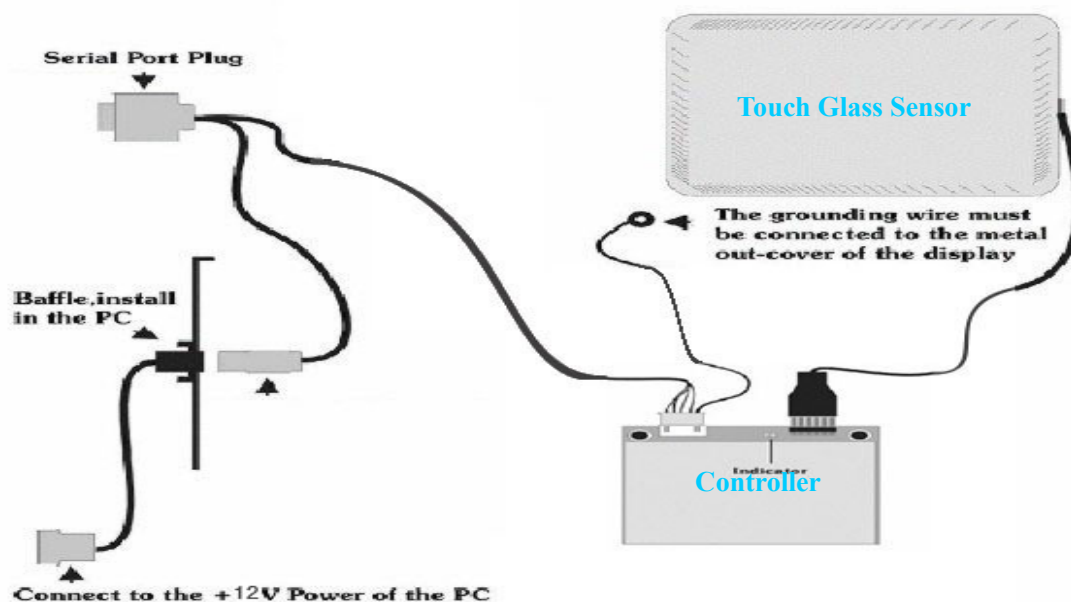
work with controller model KCA-UR01H-R1D



P1		P2		P3		P4
	1	red +12VDC	1	VCC-power+12vDC		
	2		2	GND-GND	1	
	3	green GND				
	4					
	5					
8	6	yellow CTS				
2	7	orange RXD				
3	8	white TXD				
6	9	blue DSR				
4	10	black DTR				
7	11	brown RTS				
5	12	green GND				
1						
			3			
			4			



Connection of SAW touch component regarding controller model KCA-UR01H-R1D and cable model RDH



Remarks about the LED indicator lamp on the controller

On the condition of the driver installation correctly:

- After connecting the controller and the touch sensor, if the controller have been supplied power, the LED indicator lamp would flash continuously for 10 times at the frequency of one time per second.
- After flashed 10 times, the LED indicator lamp will shine for 6 seconds and then turn off. It is a process that the controller inspect the touch sensor.
- Then the LED indicator lamp would flash at the frequency of 2 times per second, and now the controller start working normally
- On the condition of the controller working normally, the LED indicator lamp would flash at the frequency of the touch sensor being touched.
- On the condition of the controller working normally, if the LED indicator lamp would not flash when the touch panel are touched, there may be some problems with the connecting cable, which result in the controller can't communicate with the computer.
- If the LED indicator lamp keep shining after flashed 10 times, the possible reasons are following: Touchscreen unconnected or not connected properly; Touchscreen damaged; Controller damaged

On the condition of the driver installation wrongly or the driver uninstalled

- After the serial interface controller prepare working, the LED indicator lamp would still flash at the frequency of the touch panel being touched, but the cursor would not move, and now you just have to install the right driver.
- After the USB interface controller prepare working, the LED indicator lamp would keep shining for a second and then would flash at the frequency of one time per 2 seconds, and now you just have to install the right driver.

Part 6. Integration process

- Connect the cable to the computer

- Connect the controller to the touch sensor
- Connect the controller to cable
- Install the driver responding to the controller.

Remark: The touch sensor should be integrated according to the above process, if not may result in the touch sensor working abnormally.

Part 7. Available Driver for Operation System

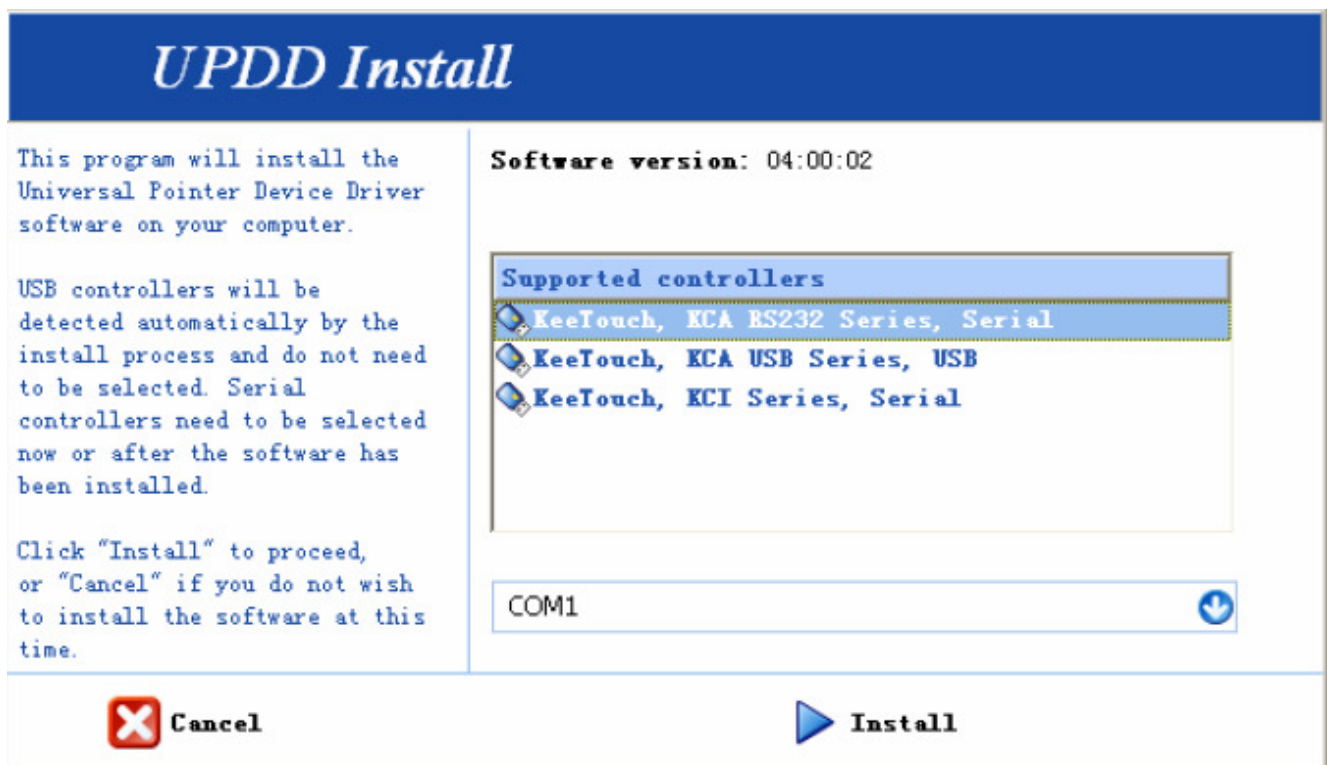
7.1 Windows 2000, CE,XP,Vista,Win7,etc.

7.2 Linux

Keetouch driver installation and calibration guide:

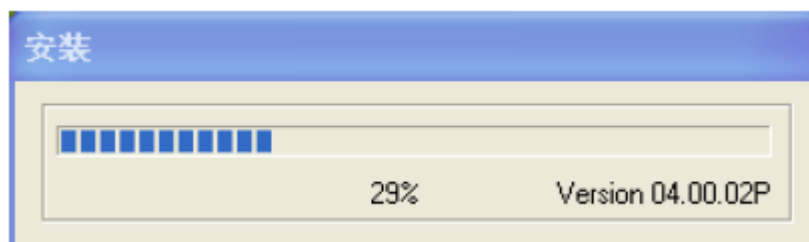
(1) driver installation guide:

double click the file of "Setup.exe" in the folder , the Windows will flip Dialog Box as follow:

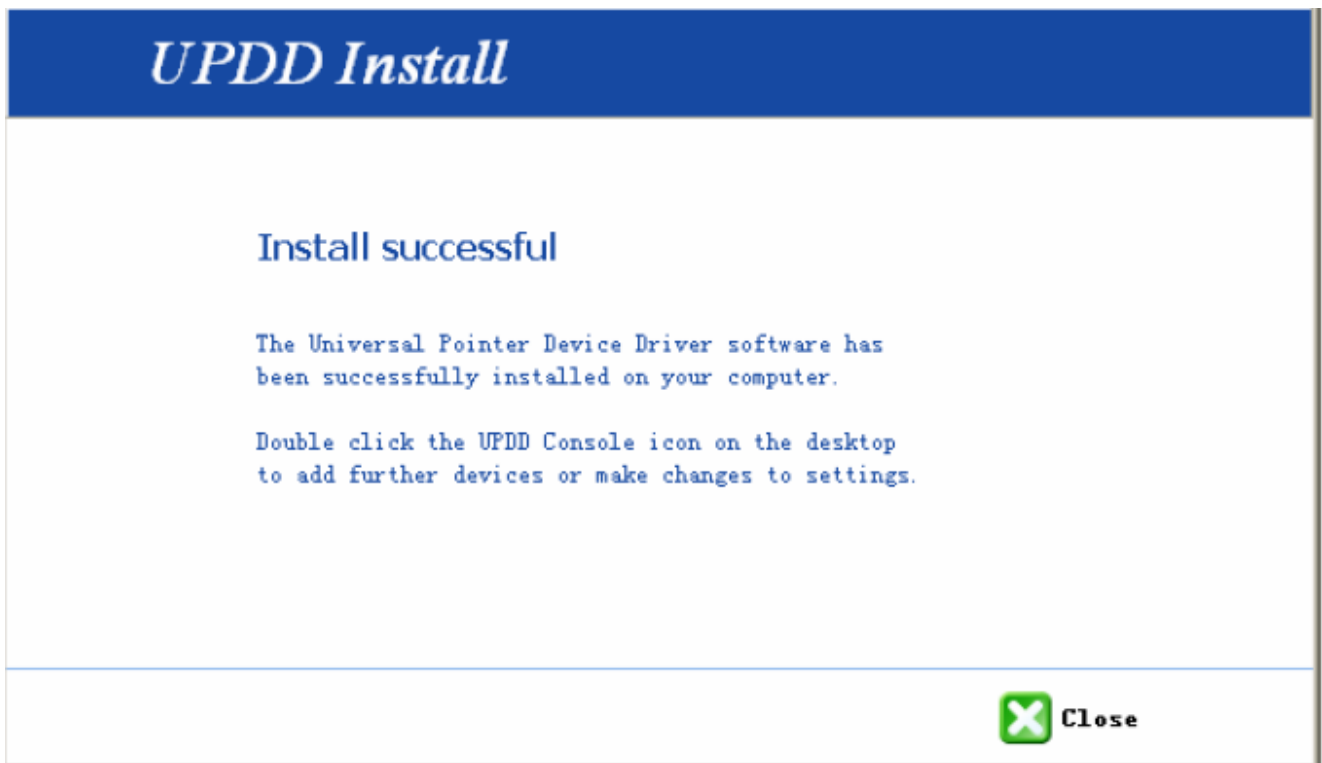


Remark: Install the RS232 driver, please chose the"KeeTouch,KCA RS232 Series,Serial"; Install the USB driver, please chose the "KeeTouch, KCA USB Series, USB";


After selecting the proper interface, click the Install button to start installing the driver as following.

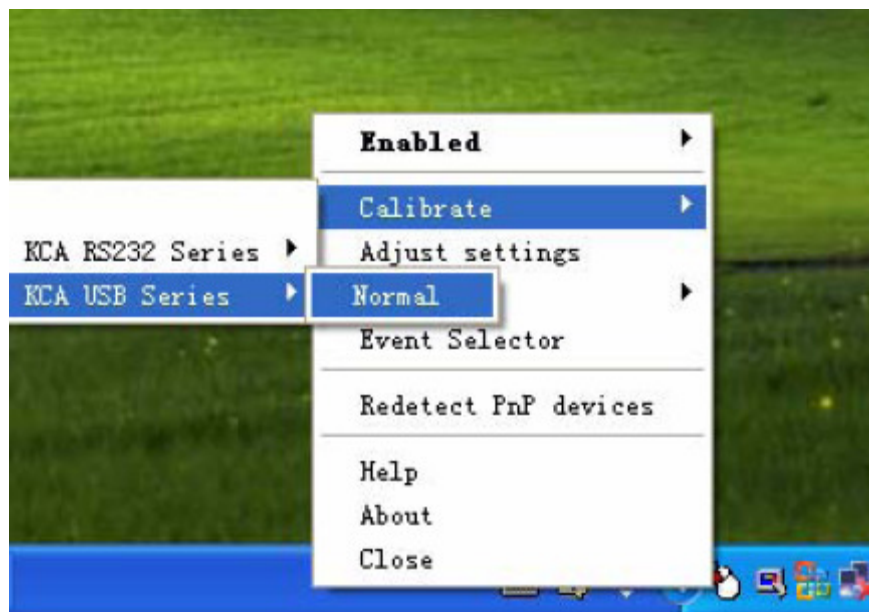


Installation successfully as following:



(2) Calibration guide

Click  at the right side in the down corner of the Desk-Top, then choose “calibrate” in the pop-out of the menu, and choose the “RS232” or “USB” at the submenu, as follow:



Windows will pop-out the calibration interface, then click “+” with finger one by one, as follow:



KeeTouch, KCA USB Series on Whole Desktop
Please touch the center of each cross as it appears

After clicking the “+” on by one, the calibration is completed.

Part 8. Product Warranty

- SAW sensor for 5 years
- SAW controller for 3 years

Part 9. How to contact us

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